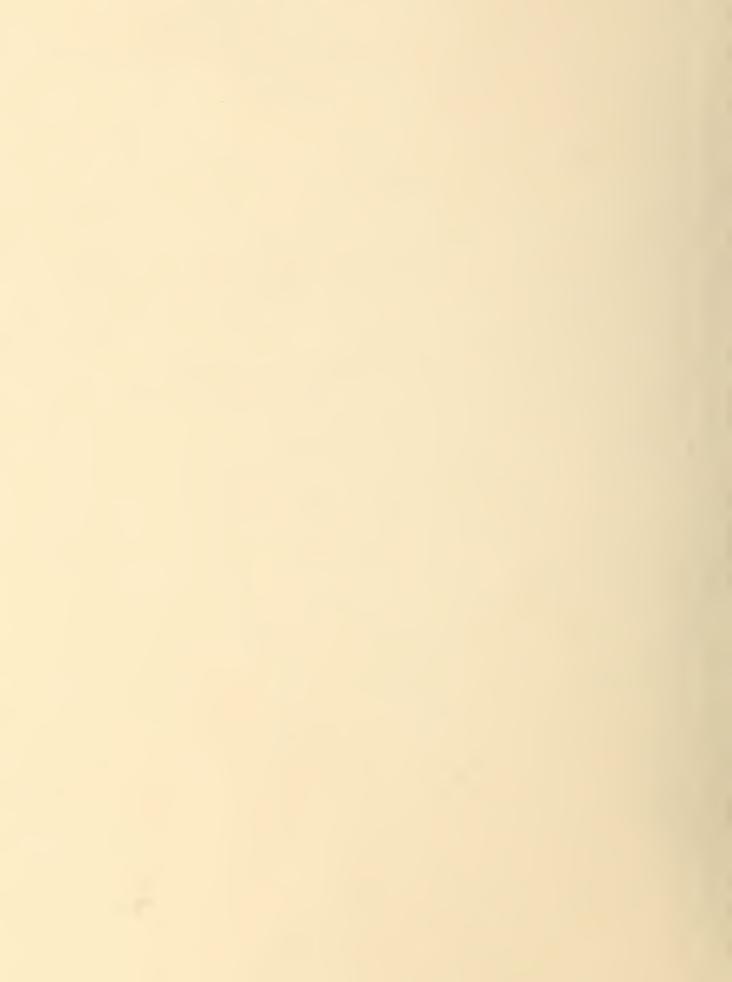
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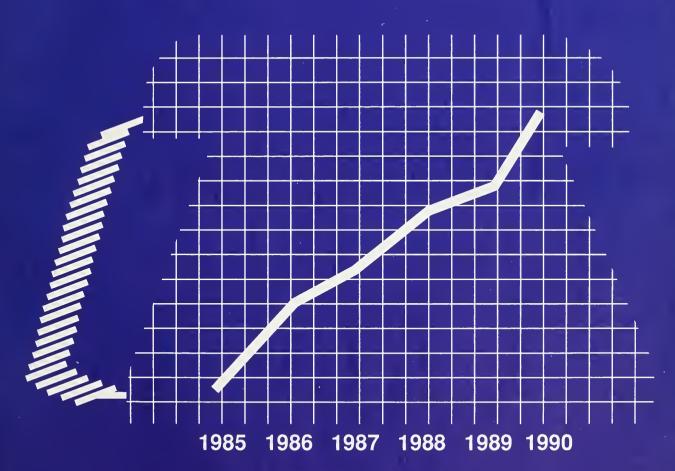
Food Safety and Inspection Service

Public Awareness Office

Meat and Poultry Hotline Staff

# The Meat and Poultry Hotline:

A Retrospective 1985-1990



Number of Phone Calls



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#### Preface

The Meat and Poultry Hotline completed its fifth tollfree year during FY '90. Operated by the U.S. Department of Agriculture's Food Safety and Inspection Service (FSIS), the Hotline was organized to provide food safety education to consumers in order to reduce the risks of foodborne illness. The ongoing need for basic food safety advice, such as methods of handling, preparing, and storing foods, was evident throughout the period.

Approximately 278,000 consumers called the Hotline's food safety specialists since April 1985.\* This one-to-one contact with consumers, a hallmark of the Hotline's operation since its inception, has been maintained while the scope of the Hotline service has been greatly expanded through the years.

This report is a special retrospective of trends in calls to the Hotline from FY '85 to FY '90. Following the retrospective is an annual summary of calls to the Hotline during FY 1990 and a summary of issues and initiatives undertaken that year.



\* The Meat and Poultry Hotline operates from 10 a.m. to 4 p.m., Eastern time, except during November when hours are expanded. Of the 278,000 calls received, 59 percent were received during regular business hours. Food safety specialists spoke with 138,400 of these callers, or 84 percent. Sixteen percent of the callers who reached the Hotline hung up before speaking with a specialist. All callers heard a recorded food safety message.



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## The Meat and Poultry Hotline A Retrospective 1985 - 1990

#### Introduction

Basic questions about the safe handling of food predominated calls to the Hotline during the 1985-90 period and the number of inquiries grew. Because of enhanced media coverage of the issue, consumers became increasingly aware of specific bacteria in food that cause illness during those years. At the same time they continued to be unfamiliar with safe food handling practices that could help prevent sickness. The number of questions about the use of hormones in animals, residues in food, and other technical and regulatory issues involving food safety was relatively low.

The nature of the Hotline's phone calls reflected nationwide trends also. Calls about the safe storage and handling of a wide variety of foods in "new generation" packaging increased over the years, as more consumers used convenience foods.

The Hotline proved to be a valuable tool for policymakers during this period as well. Consumer calls provided an "early warning" on food safety problems in the marketplace that needed attention. Calls to the Hotline also helped identify topics where consumers needed more information, and new educational strategies were undertaken based on that knowledge.

Each year the number of general consumer calls to the Hotline grew and the nature of the callers became increasingly varied. New callers included reporters, cookbook authors, extension agents and others involved in food information who used the Hotline's home economists and registered dietitians for the latest and most accurate information about food safety.

A more detailed analysis of the trends in calls to the Hotline over the period follows.

#### Trends Analysis

#### Awareness of Foodborne Illness Bacteria Grew and Calls to the Hotline About Specific Pathogens Increased, Yet Consumers Still Seek Information About Basic Safe Food Handling Practices

Consumer calls requesting basic safe food handling information predominated and increased each year that the Hotline was in operation. Expanded publicity about the Hotline and enhanced attention paid to food safety issues by the media, consumer groups, and elected officials led to increases in call volume. Cover stories were featured in major news magazines and Congressional hearings were held on a variety of food safety matters. Issues such as the safety of the pesticide alar used in growing apples and the need for Federal inspection of fish were among the topics. President George Bush added to the public attention to these issues by announcing his own Food Safety Plan.

Increased awareness of food safety by the public resulted in increased call volume, but the topics of the calls remained consistent. Consumers asked most often about elements of food safety under their direct control—the handling, preparation, and storage of food they eat.

Often consumers were skeptical that the food handling habits they had used over the years were not safe. Many had heard that food should never be refrozen but they didn't know why. They called the Hotline for help in understanding what practices are important to follow and the reasons for them.

Consumers called the Hotline for clarification about longstanding "mythologies" as well.

In the early months of the Hotline, few callers referred to foodborne bacteria by a specific name. Increased media publicity about particular pathogens changed that. Largely attributable to a single nationwide television show, the number of questions about bacteria that cause foodborne illness rose from 3 to 10 percent in FY '87 alone.

The effect of media coverage of the incidents of illness from Salmonella enteritidis in eggs is an excellent example of this trend. When it was first discovered that the pathogen was linked to clean, unbroken eggs, Hotline food safety experts suggested that consumers not eat raw and lightly cooked eggs. But early in 1988 when the recommendation was first made and there had

been very little publicity about the problem, callers were resistant to the advice.

Subsequently, an intensive USDA-sponsored public education effort was undertaken, and media coverage increased. Calls to the Hotline about eggs numbered a little over 300 in FY '87 and rose to over 3,000 in FY '90. Questions shifted from general vague inquiries to more specific product-oriented ones. While in 1988 a caller might have said, "I heard on the radio that people can get sick from their salad dressings," a caller in 1990 was likely to say, "Will homemade eggnog be safer if pasteurized egg substitutes are used in place of fresh eggs that might contain Salmonella enteritidis?"

Callers mentioned so-called "emerging pathogens" by their specific names as well. These include campylobacter, shigella, and listeria. The association in consumers' minds between pork and trichinosis remained strong during this period, even though incidents of the disease were very low.

#### Questions About the Use of Hormones in Animal Products, Residues in Food, and Other Regulatory Issues Involving Food Safety Were Few

Caller inquiries about the technical and regulatory side of food safety were few and generally reflected unique political, social, or scientific developments. Once an issue ceased to receive media attention, calls to the Hotline on the topic dwindled.

The issue of growth hormones in animals provides a good example of this phenomenon. In 1985, there was speculation that two animal growth promotants were the cause of early sexual development in some Puerto Rican children and the issue received considerable publicity. As a result of this publicity, calls came into the Hotline from consumers in all parts of the country who were concerned about the health ramifications of eating meat of animals that had been treated with hormones. Once USDA announced that it had found no evidence to support the contention that the hormones had caused the aberrant growth, calls to the Hotline about hormone use virtually ceased.

The number of questions about hormones increased for only very brief periods during 1989 and 1990 when the use of growth hormones in U.S. animal products became a trade issue with the European Community. When publicity on the issue abated, once again calls on the topic stopped.

In 1986, the nuclear accident in Chernobyl generated calls from consumers concerned that radiation may have contaminated food products brought into the United States. Tests at ports of entry that detected no high levels of radiation during that time quelled consumers' fears.

Calls concerning chemical contamination of food have come in clusters, too. For example, surveillance tests for the pesticide heptachlor were stepped up on two occasions when routine monitoring detected its presence in animal products and calls about the pesticide came into the Hotline. However, except for these brief periods in 1986 and 1989, no callers asked about heptachlor by name. Customarily, all questions concerning pesticides and residues accounted for less than 2 percent of inquiries.

One consumer concern that has surfaced continually through the years involves the safety of irradiated foods. The issue is raised by callers when regulatory action is taken, such as the approval from the Food and Drug Administration (FDA) for the irradiation of chicken, and dies down after news coverage of the action has passed. (Callers were assured of the safety of irradiated food as approved by FDA.)

#### Consumer Calls Served as a First Alert to Problems and Changes in the Marketplace

In addition to the food safety information the Hotline staff has provided consumers over the last 5 years, Hotline callers in turn have provided important information to USDA. It was a call to the Hotline that generated a correction to unsafe thawing instructions printed on some turkey labels. A tip from a caller who was allergic to chicken but had an allergic reaction to a beef potpie resulted in the investigation of a food processor. Somehow chicken was being processed into his "beef" potpies.

Numerous FSIS educational campaigns were undertaken and advisories issued to food retailers and distributors as a result of calls to the Hotline about convenience foods. Examples include recommendations on retail-stuffed cooked and uncooked turkey that consumers were buying in an effort to save time. While the immediate questions were answered, it was apparent that the purchase of these items would continue and that information needed to be developed for consumers, the media, and the food industry.

A special task force of microbiologists, public affairs specialists, and home economists met to review information being given to consumers about these convenience turkey products and to develop advisories for purchase and handling. Consumer guidelines were developed, and the information was widely distributed to the print media. A series of video news releases were distributed to television stations highlighting how to safely handle these products.

Recommendations were made against selling retail-stuffed fresh turkey or other whole stuffed poultry and fully cooked stuffed turkey for reheating later at home. The guidelines were distributed to retail grocers through the Food Marketing Institute.

The quest for convenience has influenced the types of food products on the market and the nature of the calls to the Hotline as well. Today's supermarket showcases a rapidly changing array of food choices. Supermarket delicatessens and gourmet takeout restaurants offer new alternatives to cooking "from scratch." "New generation" packages such as controlled atmosphere and aseptic packaging have proliferated. Consequently, the number of consumer calls to the Hotline about convenience foods increased each year.

For the most part, callers wanted to know about storage requirements for these products and sought clarification about handling information contained on the label. Of particular concern to consumers was the meaning of the dates stamped on the packages.

The search for convenience has caused an increase in the popularity of more traditional methods of food preparation as well. Questions from callers concerned about the safe use of slow cookers increased over the years.

In 1985, a substantial number of callers during the Christmas holiday had questions about the safety of mail-order foods they had received. In a number of cases, mail-order foods were handled in a manner that made them potentially dangerous to consumers. Often these products were shipped without a coolant and arrived at their destination warm to the touch. Research showed that some companies shipping these products had misconceptions about their safety, and often erroneously advised consumers that refrigeration was not required due to processing and packaging.

In cooperation with the Direct Marketing Association (DMA), a joint advisory describing safe methods of shipping perishable foods was prepared and mailed to DMA's membership. A story on mail-order foods was featured in the holiday issue of the FSIS

magazine, Food News for Consumers, and was issued as a press release. Hotline staff mentioned this topic in all press interviews related to holiday food safety. A video news release was distributed, and a segment of the USDA television program "A Better Way" was devoted to mail-order foods and featured a Hotline food safety specialist.

Consumer calls to the Hotline increased threefold during the first 5 years, and the backgrounds of the callers expanded, too. Representatives from the news media, cookbook authors, and USDA extension agents have used the Hotline as a resource. Grocery store managers, restaurant owners, schoolteachers, day care providers, quality control directors, and officers of trade associations, among others, have all called the Hotline in search of important food safety information.

Conclusion

Yet while the number and sophistication of the calls to the Hotline have increased significantly over the years, one aspect of the Hotline operation has remained the same—the Hotline staff's commitment to service and customer satisfaction. The Hotline's food safety experts are dedicated to: (1) answering food safety questions with the most current data available; (2) conducting research to provide a complete and accurate answer for each caller; and (3) referring caller complaints about the safety of food products in the marketplace to the appropriate Federal, State or local government official to ensure a rapid solution to any problem.

### The Meat and Poultry Hotline FY '90

#### Introduction

FY '90 was a busy one for the Meat and Poultry Hotline staff. Nearly 80,000 people called the Hotline—the highest annual figure ever. Of these calls, 59 percent (approximately 47,000) were received during regular business hours. Food safety specialists spoke with 85 percent of the callers; 15 percent of the callers who reached the Hotline hung up before speaking with a food safety specialist. On average, these callers held for 1:28 minutes before abandoning their calls; presumably many were able to reach the Hotline on a subsequent attempt. Those who called after hours heard a recorded food safety message and were encouraged to call back during business hours. An additional 135,000 calls to the Hotline were not completed because all lines were busy.

Unless otherwise stated, the total and percentages in this report are based on approximately 38,700 records of conversations with callers who spoke with food safety specialists during regular hours of operation. Callers often inquired about several topics of concern. A section entitled "Issues and Initiatives" describes trends in the nature of caller queries, and some of the events that prompted these specific types of questions. A summary of the characteristics and common concerns of the callers follows. The major operational goals of the Hotline are discussed, and staff biographies conclude the report.

#### Issues and Initiatives

#### Consumers at Risk

In April 1990, FSIS began a multimedia educational campaign targeted to consumers who are at risk for foodborne illness—the elderly, infants, pregnant women, and the chronically ill. This effort was enthusiastically supported by the Hotline food safety specialists who answered questions generated from this outreach effort. They explained to callers why they were particularly at risk and advised them of the special cautions they should take when handling food. A newly developed pamphlet, *Is Someone You Know at Risk for Foodborne Illness*, was distributed.

#### Microwave Cooking

Microwave cooking safety received increased attention by the scientific community and consumers alike during 1990 when the safety of some cookware and plastic wraps used in the cooking process came under increased scrutiny. The release of studies in Great Britain suggesting that unevenness of cooking in the microwave oven made the process unsafe caused international concern as well.

A literature search by FSIS microbiologists in collaboration with Hotline food safety specialists showed that microwave cooking was in fact safe if consumers used correct materials for cooking and took precautions to ensure the evenness of the cooking process. Armed with these recommendations, Hotline staffers participated in a task force established by representatives from microwave oven manufacturing companies and the food industry to address these safety issues. USDA recommendations and research results were also sent to the Canadian Ministry of Agriculture and Food to help address concerns there.

To advise consumers on safe microwave cooking practices, the Meat and Poultry Hotline staff cooperated with industry and other government agencies to develop a consumer education brochure. Articles on the topic were written by Hotline food safety specialists and were distributed to consumer publications. A special "Microwave Handbook" was developed and published in the FSIS magazine, *Food News for Consumers*.

More than 700 callers asked specifically about the safety of microwave cooking. Conservative estimates show that 5-10 percent of the general inquiries into the Hotline regarding cooking methods, times, and temperatures applied solely to microwave ovens.

#### **Product Recalls**

The number of queries about recalled food products increased fivefold over FY '89 due to the inclusion of the Hotline phone number on FSIS press releases announcing a recall. In addition to calls from consumers, inquiries came from officials in local health departments and poison control centers who sought the latest information in order to advise their constituencies. The after-hours call volume was also higher in the days following a product recall.

A subject that received a great deal of attention during FY 1990 was the bacterium Listeria monocytogenes. In 1989, FSIS increased its monitoring for listeria in ready-to-eat meat and poultry products based on new information about the bacterium. As a result, the number of products recalled because of listeria increased. The recall of a single product, turkey franks, generated several hundred calls.

#### Microbiological Safety--Salmonella Enteritidis

The overwhelming majority of calls to the Hotline that involved eggs were inquiries about microbiological issues and nearly 1,300 callers inquired specifically about Salmonella enteritidis. A report on the discovery of S. enteritidis in eggs, released in a major medical publication, followed by media reports on outbreaks of SE infections in several cities spurred the calls.

Inquiries, for the most part, concerned the safety of specific recipes that included raw eggs, such as Hollandaise sauce, egg nog, and even gingerbread houses. There was also a considerable increase in calls from consumers asking about dried and pasteurized eggs as alternatives to shell eggs. Of particular concern to the Hotline's food safety specialists was the lack of awareness on the part of callers that hard-cooked eggs are perishable and therefore potentially hazardous. Predictably, this issue arose most frequently during Easter time.

#### Food Additives and Residues

The percentage of callers inquiring about food additives and residues remains low. Less than 2 percent of the callers in FY '90 asked questions of this nature. The topics of these calls covered a wide range—from the use of animal growth hormones and antibiotics, to fears of pesticide residues and food additives, to questions about irradiation and chemical contamination.

#### Safe Holiday Feasts

Calling the Meat and Poultry Hotline has become as much a part of America's Thanksgiving tradition as eating turkey and watching football. More than 16,000 people called the Hotline in FY '90 to ask questions concerning their holiday meals.

Each year an analysis of information sought by callers during Thanksgiving helps determine the FSIS education campaign for the next holiday season. This year's campaign theme was "Have Turkey, Will Travel" and cooks planning a mobile feast spoke with Hotline food safety specialists in record numbers. Their reasons for wanting to transport foods varied. Some callers wanted to continue serving traditional family favorites since moving apart. Others hoped to make holiday meal preparation easier for aging parents.

With turkey becoming a year-round favorite, interest in turkey basics was not limited to the fall and winter months. Frequently heard questions were: "How long will turkey last in the freezer?" and "Is it safe to use a turkey I've had frozen since last year?" These questions provide the Hotline an opportunity to help callers distinguish between food safety and food quality issues.

#### Power Failures

Each year snowstorms and violent summer thunderstorms predictably precipitate questions about the effects of power failure on the safe storage of food. Natural disasters added to the trend in 1990. A surge of calls reached the Hotline from the Carolinas and Georgia after Hurricane Hugo, and from California after the Loma Prieta Earthquake hit the San Francisco Bay area. Consumers asked questions about the safety of their food and water. Three percent of all calls in FY '90 concerned power outage situations.

#### Statistical Summary

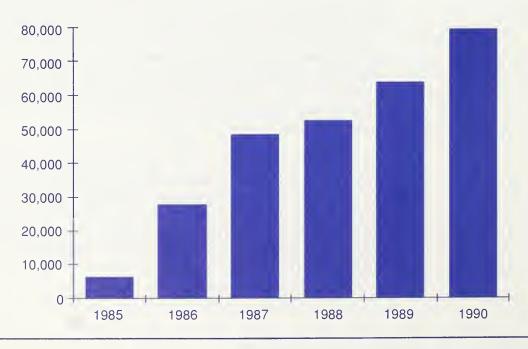
#### Call Volume

Consumer need for food safety information remains apparent as call volume to the Meat and Poultry Hotline increased by 25 percent over FY '89. (figure 1) Nearly 80,000 calls were received in FY '90. As in years past, there was a 60/40 split between calls received during business hours and those registered after hours. Recorded messages on a variety of food safety issues were in use to service customers at all hours.

As in past years, November was the busiest month for the Hotline and operating hours were expanded for the fourth year. Call volume around the Thanksgiving holiday increased 21 percent over the previous year.



#### **Call Volume by Fiscal Year**

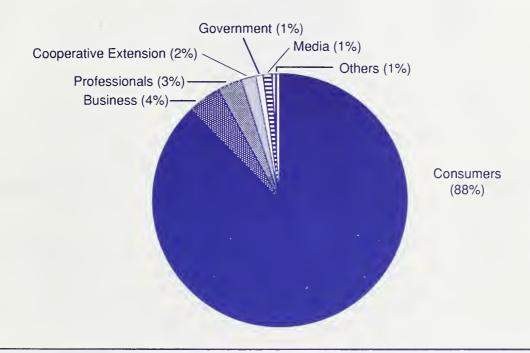


#### Caller Characteristics

The Hotline continued to fulfill its primary mission, which is to provide information to consumers. This group formed the largest segment of Hotline users. Other users included business people, the media, government officials including Cooperative Extension agents, students, teachers, citizen interest groups, legislators, and other professionals such as registered dietitians. (figure 2)

Figure 2

#### **Description of Hotline Callers**



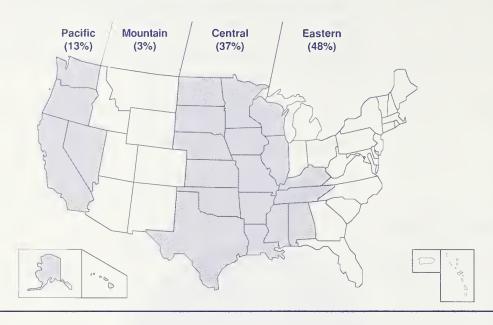
#### Caller's Home State

Callers hailed from all corners of the Nation in FY '90. A total of 14 calls came from foreign countries. In the United States, nearly half (44 percent) of the calls came from six States—New York, California, Ohio, Illinois, Pennsylvania, and Florida. The weekly publishing of the Hotline number in a major metropolitan newspaper largely accounted for Ohio's becoming one of the top three States receiving calls.

Historically, the majority of the calls to the Hotline have come from the Eastern States. This year that trend continued, but the differential over the next highest region is smaller. (figure 3)

Figure 3

#### **Hotline Callers' Home States**



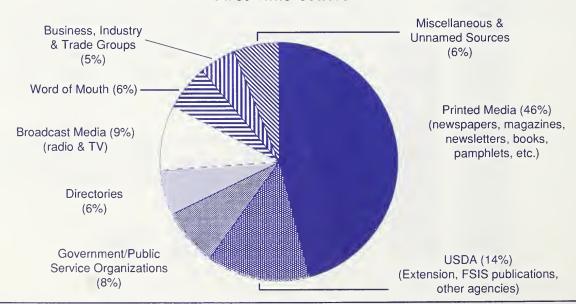
#### Source of the Hotline Telephone Number

The Hotline phone number appeared in newspapers, in membership association newsletters, in a nationally distributed cookbook, and on radio and television during FY '90.

Newspapers were the leading source of information about the Hotline for first-time callers. Hundreds of daily and weekly papers printed Hotline advertisements or food safety articles containing the tollfree number. Magazines, journals, and USDA's Extension Service agents were also important means by which consumers learned of the Hotline. (figure 4)

Figure 4

#### Source of Hotline Telephone Number: First-Time Callers



The percentage of repeat callers has slowly risen each year that the Hotline has been in service. In FY '90, 20 percent of Hotline callers had spoken previously to a staff member.

#### Inquiry Type

Requests for information constituted 98 percent of all calls to the Hotline. Complaints about food products made up the remaining 2 percent (629) of all inquiries. Of these complaints, 255 were referred to FSIS epidemiologists or compliance officers for investigation. Just over half of these complaints alleged illness or injury from a meat or poultry product. Another 29 percent of these calls charged that the product contained a foreign object.

The remaining 20 percent of the complaints were of a more general nature and, in most instances, were handled by Hotline staff members. These complaints involved the appearance, content, taste, texture, or odor of the food. Some grievances concerned food labeling and dating, the use of agricultural chemicals, and other regulatory issues. One-third of the general complaints were referred further within USDA or to another government agency holding legal jurisdiction over the matter.

#### Subject of Inquiry

The Hazard Analysis and Critical Control Point (HACCP) system is a specialized system for food safety control. It uses scientific methods to identify and control points in the food production system where hazardous situations could result that would jeopardize the safety of the product. FSIS asked microbiologists and epidemiologists to analyze consumer handling of food in the home by using a HACCP approach as well. These scientists identified the critical food handling practices in the areas of acquisition, storage, preparation, serving, and handling leftovers, where if food weren't handled properly, illness could occur.

It is significant that 72 percent of all calls to the Hotline involved questions about these highly critical areas. (figure 5) Some common topics of phone calls include leaving food too long at room temperature, improper cooling of hot foods, and insufficient or interrupted cooking. Questions about freezing and refrigeration were also quite common. Callers asked about the degree to which cold storage inhibits bacterial growth, whether freezer burn is associated with safety hazards, and why perishable foods that appear to be fine after weeks or months of refrigeration may not be safe to eat.

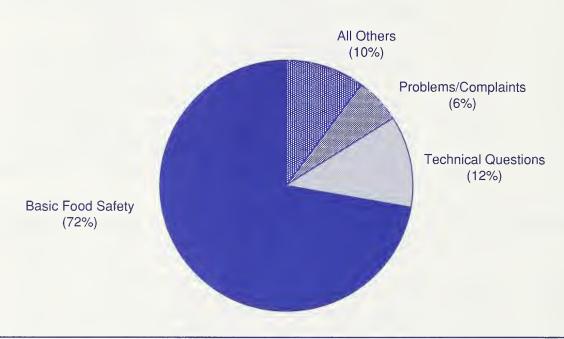
In addition to the basic food safety questions, 12 percent of the callers asked about the more technical and regulatory aspects of food safety. Callers wanted to know about content of food products, dating and labeling practices, the use of agri-chemicals in food production, and the dangers of chemical contaminants, to name a few.

Sensory aspects of food accounted for 4 percent of the calls. Callers wanted to know about dark bones in chicken and the variations in the redness of red meats.

The remaining 10 percent of the calls dealt with a wide diversity of other topics.



#### **Subjects of Inquiry**



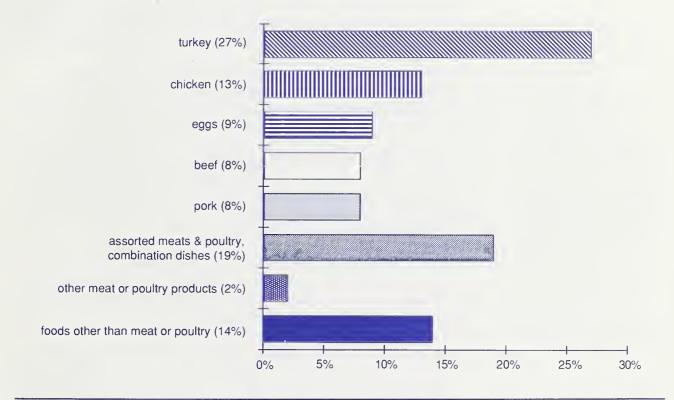
#### Foods of Interest

Most Hotline callers, 79 percent, expressed their questions in terms of a specific product. For the third consecutive year, product-specific inquiries were directed toward five categories—turkey (27 percent), chicken (13 percent), eggs (9 percent), beef (8 percent), and pork (8 percent). Nineteen percent of the queries involved an assortment of foods. (figure 6)

Although the focus of the Hotline is on meat and poultry products, consumers' calls were not limited to those items. Of those subjects not under FSIS jurisdiction, fish was the one most often called about.

While callers also asked most frequently about fresh, minimally processed foods, there was appreciable interest in canned goods, luncheon meats, fresh-refrigerated items, precooked meals or entrees, ground meats and ground poultry, cured meats, and smoked meats or poultry. Two-thirds of the callers had questions about products that were in their homes at the time of the call; the remaining one-third of the questions referred to general situations or to products yet to be purchased. Callers had more questions about uncooked foods than cooked foods.

Figure 6 Foods of Interest: Product-Specific Inquiries



#### Disposition of Inquiries Received

The Hotline food safety specialists answered 90 percent of all inquiries received. When the subject matter fell outside the Hotline mandate, the caller was referred to other sources for information. Five percent of all questions were referred to other offices or agencies within the Department of Agriculture. The remaining 5 percent of the inquiries (1,952) were typically referred to the Food and Drug Administration, local health departments, or industry trade associations for assistance.

#### **Operations**

#### Training

Frequent inservice training sessions were undertaken by the Hotline during FY 1990 to ensure the staff kept current on matters of continuing concern to Hotline callers and had accurate information on emerging food safety issues as they developed. Topics of inservice training involved a wide variety of issues such as FSIS administration of product recalls, controversy surrounding the use of ham netting, the nature of bovine spongiform encephalopathy disease which affects cattle, and egg products inspection, to name a few. Training was used to enhance both interpersonal and telephone skills.

Information was also gained through onsite visits to broiler, slaughter, and pork processing plants to better answer consumer questions about food production.

#### Research

Most Hotline inquiries are responded to immediately with resources at hand; fewer than 1% require further research to answer. Just over 200 questions fell into this category. Reference materials and/or program specialists were consulted and the consumer received a followup call.

In FY '90, researching new topics helped consumers stay in touch with the latest research on food safety while Government scientists were given a glimpse of the everyday problems consumers may have with the food they eat.

For example, a caller with food allergies experienced a reaction and was concerned that unlabeled milk derivatives might be present in the hotdog she had eaten. This question was a timely one, for in 1990, FSIS changed its regulations to require substances used to flavor meat and poultry products be listed on the label by their common or usual name, including proteinaceous materials derived from livestock, poultry, eggs, milk, plants, or yeast. This change was made for the very reason the caller had called the Hotline—consumers need to know the nature of the products they're eating to protect themselves from allergic reactions. Thus, the person who called the Hotline could be assured of safely eating hotdogs.

Research also helped reassure several consumers who were worried that eating chicken would expose them to encephalitis, a virus discovered in chickens in one area of Florida. After checking with FSIS epidemiologists, the Hotline staff assured these callers that encephalitis is not transmissible from chickens to humans.

Linking consumers with a network of food scientists not only created good communication but also shaped new food policies. In the fall, when calls started rushing in about what kinds of food families could safely send their loved ones stationed in Saudi Arabia, the Hotline staff knew a major new issue had to be addressed.

The Hotline staff, conferring with FSIS food scientists, the Defense Logistics Agency, the National Food Processors Association, the Embassy of Saudi Arabia, and the U.S. Postal Service, developed packing and mailing guidelines. Newspaper and television pick-up of a press release on sending food to the Middle East issued by USDA prompted over 1,400 calls.

#### Information Resources Management

Improvements of information resources management and systems administration were undertaken as the number of calls to the Hotline increased significantly this year over last. The Hotline built upon recent system enhancements such as redesigned data-entry screens to streamline data retrieval. Network hardware and software were upgraded, stored data was converted to a new format, standard reports on data were programmed, and the staff was trained in structured query language.

The data collected was integrated into consumer publications, speeches, news articles, reports, and an agencywide bimonthly newsletter. An analysis of caller questions was invaluable in planning and evaluating educational campaigns.

#### Hotline Promotion

The Hotline number was widely disseminated during FY '90. While the means of the promotion varied, all promotions described the types of questions handled by the Hotline staff, its hours of operation, and Government sponsorship.

Public service print advertisements were again utilized and were printed in hundreds of magazines and newspapers. "Hotline Calling" columns, which employed a question-and-answer format, appeared in each issue of the FSIS magazine *Food News for Consumers* and were reprinted in various forms by the media. Feature press releases were sent to daily and weekly newspapers highlighting seasonal safe food handling practices. Over 100 million people received information about the Hotline through these promotional efforts to the print media.

Three video news releases were produced that contained information about critical safe food handling practices along with the Hotline telephone number. These "VNRs" were sent out by satellite to television stations throughout the Nation.

Interviews with the Hotline staff by the print and broadcast media caused people to learn about the Hotline. Interviews were filmed by the Cable News Network, Hearst Broadcasting, the Canadian Broadcasting Company, and numerous network local affiliates. Reporters from *Reader's Digest, Parade Magazine*, and the *Boston Globe*, among others, did stories based on conversations with the Hotline staff.

#### Outreach Efforts

Members of the Hotline team delivered their food safety message through other educational means as well as over the phone. Hotline home economists and dietitians traveled to various conventions to give speeches, distribute publications, and lend their expertise at FSIS exhibits of food safety information. They attended the annual conventions of the American Dietetic Association and the American Home Economics Association, and meetings of the American Meat Institute, among others.

Once again the Hotline staff participated in the USDA/FDA Journalists' Conference. The Hotline supervisor addressed the journalists on the trends in consumer concerns about food safety, and Hotline home economists staffed an exhibit that presented SUMMER FOOD SAFETY MYTHS and the necessary equipment to have in the home to ensure that food is safely handled.

Home economists also spoke to local service and professional associations, such as the county cooperative extension service and local home economics association, about food safety issues. One staff member taught blind and visually impaired consumers safe microwave cooking techniques.

The Hotline served as part of FSIS' publication distribution system, too. Publications were mailed to callers upon request, and some bulk orders from service and educational groups were routed through the Hotline.

#### Staffing Structure

Among the 15 people on the Hotline staff is a supervisory technical information specialist, a home economist, who oversees the Hotline operations. Two senior staff members serve as frontline supervisors, directing call-handling functions, research, complaint management, and staff training. A management analyst, five part time technical information specialists, and six temporary intermittent technical information specialists complete the Hotline team.

The technical information specialists include nutrition and home economics educators, public health and community nutrition experts, consumer advisors, microwave cooking specialists, and registered dietitians with nursing home and hospital experience.

#### Conclusion

In the period from FY '86 through FY '90, the Meat and Poultry Hotline has made every effort to support the public health goals of the Food Safety and Inspection Service by serving as an authoritative source of information on the safe storage, handling, and preparation of food; the accurate labeling of food; and the options available when food products fail to meet standards of safety and quality. It is the hope of each member of the Hotline staff that by performing this function they can help spare consumers the physical and economic costs of foodborne illness.



The Meat and Poultry Hotline staff (pictured from left to right): Karen Tracey, Mary Wenberg, Diane VonLonkhuyzen, Susan Templin Conley, CiCi Williamson, Marilyn Johnston, Linda Burkholder, Grace Cataldo, Barbara O'Brien, Patricia Moriarty, Ann Conner, Bessie Jones Berry, and Marianne Gravely.



#### Meat and Poultry Hotline Staff

#### Bessie Jones Berry

Bessie Jones Berry, home economist, has been with the Meat and Poultry Hotline since June 1986. She serves as one of the front line supervisors, as well as the research and product complaint manager. She has a bachelor of science degree in home economics from the University of Maryland, and a master's degree in consumer affairs from Howard University in Washington, DC, that included an internship in the White House Office of Consumer Affairs. She has taught foods and nutrition courses in the public schools. Ms. Berry is originally from Guthrie, Oklahoma.

#### Linda Burkholder

Linda Burkholder is the Meat and Poultry Hotline management analyst. She is responsible for analyzing calls that come into the hotline to identify trends and to determine needs for consumer education. Ms. Burkholder started with the hotline in 1987 answering consumer calls. She has six years' experience as a home economics teacher in public schools and has taught food preparation at the college level. She received a degree in home economics education from James Madison University in Harrisonburg, Virginia and a master's degree in home economics (nutrition education and human services) from Hood College in Frederick, Maryland.

#### Grace Cataldo

Grace Cataldo, certified home economist, received a bachelor of science degree in home economics education from New Mexico State University. She previously was a public health nutritionist in New Mexico and El Paso, Texas, supervising local WIC (Women, Infants, and Children) nutrition clinics. Ms. Cataldo demonstrated microwave ovens and small appliances in department stores and has given food preparation classes. She also worked 3 years for the Monterey, California Independent School District.

#### Susan Templin Conley

Susan Templin Conley, as manager of the Meat and Poultry Hotline, is responsible for the activities of a management analyst and the full-time, part-time, and on-call home economists who answer hotline phones. She serves as media spokesperson for the Meat and Poultry Hotline, is featured on radio and television programs, and is often quoted in newspaper and magazine articles. She also writes for the FSIS magazine Food News for Consumers. Prior to joining the hotline in 1985 as a home economist, she was director of sales for a food company. She also has 10 years of experience in retail store management and has supervised a USDA-sponsored day care nutrition program. Ms. Conley, who has a degree in home economics from the University of Maryland, has also conducted cooking and microwave-use classes.

#### Ann Connor

Ann Connor received a bachelor of science degree in home economics from St. Joseph College in Maryland, a master of science degree in education from Hunter College in New York, and a master of science degree in human nutrition and foods from Virginia Polytechnic Institute and State University. She is a registered dietitian. She is an adjunct professor of nutrition in the Department of Health and Fitness at American University and a lecturer in the Dietetics department at Northern Virginia Community College.

#### Cynthia Gentsch

Cynthia Gentsch, certified home economist, joined the hotline staff in October 1990 after serving 6 years as a Cooperative Extension Agent in New York State. Previously, she taught home economics for 3 years in a Connecticut high school. Ms. Gentsch earned bachelor of science and master of science degrees in home economics from the University of Kentucky. In addition to working on the hotline, she is a home economics consultant for the Arlington County, Virginia school district. Ms. Gentsch serves on the boards of Phi Upsilon Omicron, the Washington, DC chapter of the home economics honorary, and the Northern Virginia Home Economics Association.

#### Marianne Gravely

Marianne Gravely, home economist, has a bachelor of science degree in home economics with an emphasis in foods and nutrition from Hood College in Frederick, Maryland. She has worked as a public health nutritionist and supervised a WIC nutrition program in Virginia. Previously, she was a home economist for the Yokusoka Naval Base in Japan. She is currently working on a master's degree in nutrition from Virginia Polytechnic Institute and State University in Blacksburg.

#### Marilyn Johnston

Marilyn Johnston, home economist, received a bachelor of science degree in home economics from Purdue University in Indiana and worked as a home economist for several public utilities in that State before moving to the Washington, DC area. She has extensive knowledge of microwave cooking, having taught classes for the past 12 years. In addition to answering calls, she is working on publishing a cookbook.

#### Patricia Moriarty

Patricia Moriarty has been on the hotline since July 1988. She has extensive experience in community nutrition education and health promotion programs. She previously worked for the National High Blood Pressure Education Program and was with the Greater Cincinnati Nutrition Council for 9 years. Ms. Moriarty has a bachelor of science degree in nutrition from Notre Dame College in Cleveland, Ohio, and a master of education degree from the University of Cincinnati. She is also a registered dietitian. Ms. Moriarty is active with the American Dietetic Association as a volunteer for marketing, public relations, and media communications programs.

#### Barbara O'Brien

Barbara O'Brien received a bachelor of science degree in home economics from Saint-Mary-of-the-Woods College in Indiana and completed her dietetic internship at Walter Reed General Hospital in Washington, DC. A registered, licensed dietitian, her experience has been in hospitals and nursing homes. In addition to working on the hotline, Ms. O'Brien is involved in the production of nutrition education videos for Montgomery County (Maryland) Community Television.

#### Karen Tracey

Karen Tracey serves as the hotline training manager working on the design and development of training materials for hotline staff, in addition to serving as a front line supervisor. She has been with the hotline since 1986, when she moved to Washington, DC after having been a secondary home economics teacher in Kansas for 8 years. She has a bachelor of science degree in vocational home economics education from Central Missouri State University. She has worked for the city of Independence (Missouri) Youth Employment/Life Skills Program. Ms. Tracey is currently pursuing a master's degree.

#### Diane VanLonhuyzen

Diane VanLonkhuyzen, home economist, has a varied background in the field which includes a position as consumer advisor to a major utility company in the Washington, DC area. For 9 years she ran a test kitchen developing recipes for the company's cookbook, and conducting cooking and energy conservation demonstrations in the community. Ms. VanLonkhuyzen has also served as a consultant to numerous appliance manufacturers. She has been with the hotline since September 1986, and has a bachelor of science degree in home economics from the University of Maryland. Ms. VanLonkhuyzen coordinates a variety of special projects for the hotline.

#### Mary Wenberg

Mary Wenberg received a bachelor of science degree in foods and nutrition from Ohio University and completed a dietetic internship and master of science degree from Ohio State University. A registered, licensed dietitian, her experiences include hospitals, university teaching, and school food service. Ms. Wenberg was professionally employed in Ohio, West Virginia, Minnesota, and Texas before moving to the Washington area. She is an active member of the American Dietetic Association.

#### CiCi Williamson

CiCi Williamson, certified home economist, brings expertise in the field of microwave cooking to the hotline. In addition to answering consumer calls, she is a syndicated newspaper columnist and author of three microwave cookbooks. Her articles have appeared in Food News for Consumers, professional journals, and women's magazines. She has taught microwave seminars for 14 years. Ms. Williamson is a member of Les Dames d'Escoffier and the Newspaper Food Editors and Writers Association. Her bachelor of science degree in home economics education is from the University of Maryland.





